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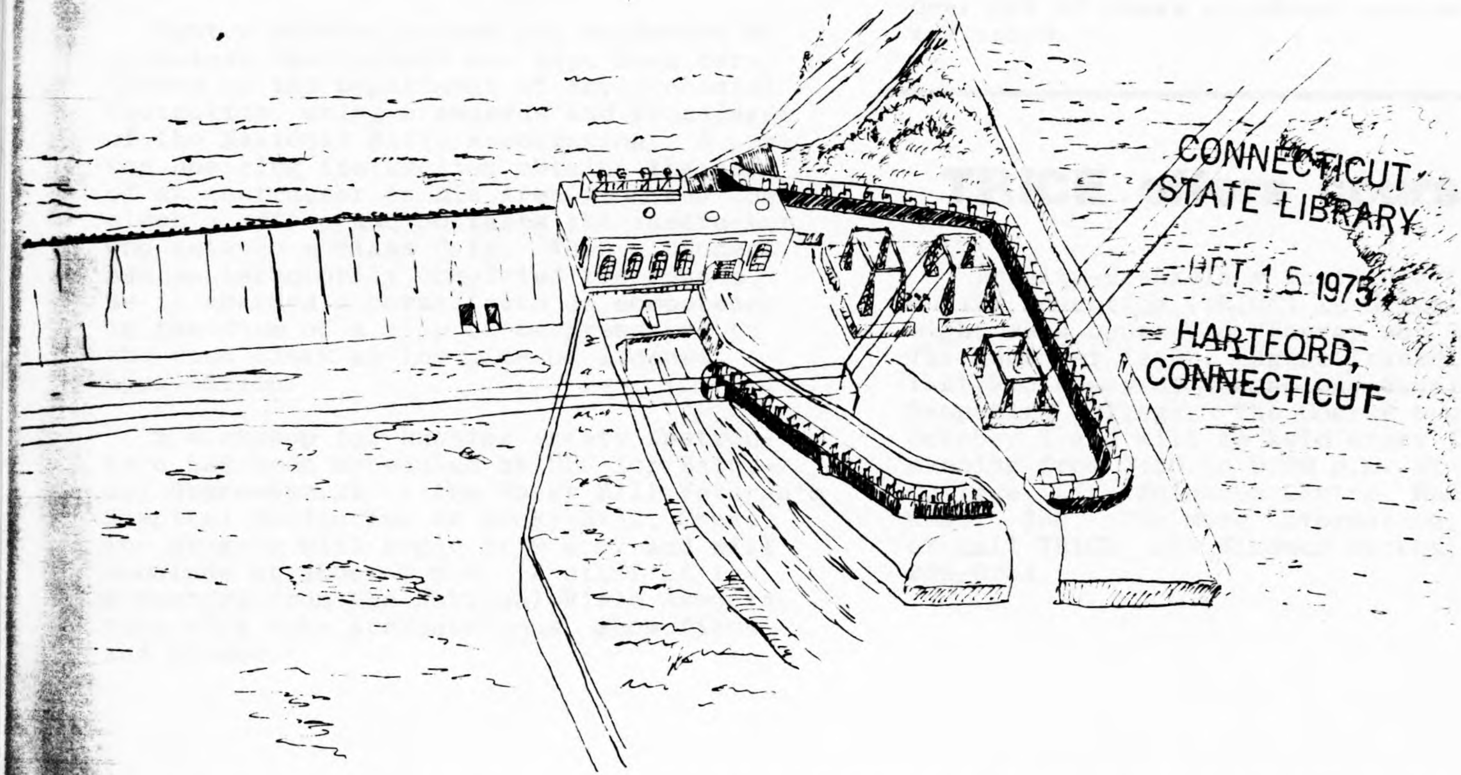
DEP citizens' bulletin



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RAINBOW DAM FISHWAY COMPLETED

first of its kind in the Conn. River Basin

The Department of Environmental Protection is proud to announce that the Rainbow Dam Fishway, the first facility of its type in the Connecticut River Basin, has now been completed. Under construction since October of 1974, the fishway forms a passage over the Rainbow Dam on the Farmington River in Windsor, eight miles from its junction with the Connecticut River. More than 100 additional miles of the Farmington River and its tributaries are now open for a spring run of spawning salmon and shad from the sea.

The states of Connecticut, Massachusetts, New Hampshire and Vermont, together with the Federal Bureau of Sport Fisheries and Wildlife and the National Marine Fisheries Service, have been working for 8 years to restore

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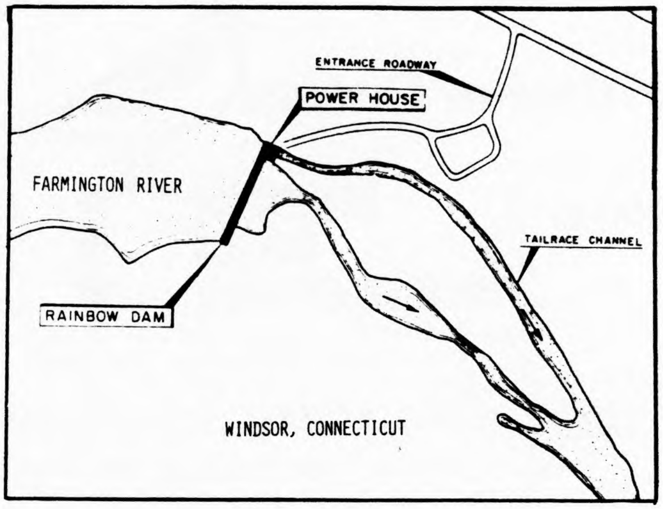


runs of anadromous fish to the Connecticut River Basin. Anadromous fish are salt-water species such as American shad and Atlantic salmon which spawn in fresh-water streams. Historically, large numbers of these fish ascended the Connecticut River and many of its tributaries to spawn. During these migrations the fish were able to surmount innumerable natural barriers in the streams, and salmon were able to reach as far upstream as Beechers Falls near the Canadian Border, a journey of 372 miles. With the construction of industrial dams on the rivers, however, the Atlantic salmon were completely eliminated from the Connecticut River Basin, and shad were limited to an area south of the Holyoke Dam.

Built in 1925 to provide auxiliary electric power, the Rainbow Dam and its power station is owned by the Stanley Works Company of New Britain. It was Stanley Works who first proposed that a fish passage facility be constructed and funded on a cooperative basis. As a result, the $750,000 cost will be split between the U. S. Fish and Wildlife Service ($375,000), the Stanley Works ($200,000) and the State of Connecticut ($175,000).

The structure itself is 720 feet long, climbing around the power station and the dam. Fish entering the passageway climb the 57-foot difference in height by swimming through sets of baffles and slots, one set for approximately each foot of elevation. The fish passing through the fishway will not be stressed, crowded, or handled during their passage through the structure, principally because of its advanced design. The fishway will also allow fish swimming downstream to bypass the power turbines. The facility is designed to accommodate 20,000 American shad and 5,000 Atlantic salmon per year.

OTHER FEATURES OF THE FISHWAY:

* A fish-counting chamber, equipped with a time-lapse movie camera, has been constructed. DEP staff will monitor fish passage for a permanent record.

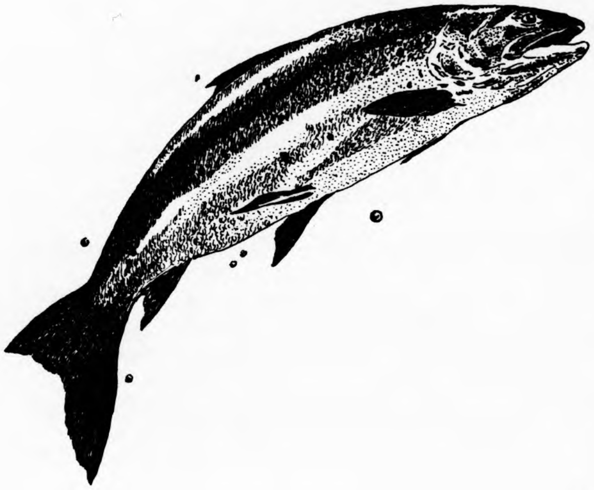
* A holding pond has been added in order to enable the retention of certain specimens for further examination or tagging.

* Public parking areas will be provided for approximately 30 cars. Persons interested in viewing fish passing through the fishway may visit next spring during daylight hours to view both the fishway and the impoundment.

ESTIMATED PERIOD OF SHAD AND ATLANTIC SALMON MIGRATIONS AT THE RAINBOW DAM, FARMINGTON RIVER, WINDSOR, CONNECTICUT

Species	Migration	Period
American shad	Adults Upstream	April 1 - June 15
	Adults Downstream	June 1 - Aug. 31
	Young of Year Downstream	Aug. 1 - Nov. 15
Atlantic salmon	Adults Upstream (Major)	April 1 - June 30 Sept. 15 - Nov. 15
	Adults Downstream (Major)	March 10 - May 20 Nov. 1 - Dec. 20
	Adults Downstream (Minor)	Dec. 20 - March 10
	Smolts Downstream (Major)	March 1 - June 20
	Smolts Downstream (Minor)	Oct. 1 - Nov. 30

FOR ANY FURTHER INFORMATION ON THE RAINBOW DAM FISHWAY, PLEASE CALL DICK HAMES, DEP FISH & WATERLIFE UNIT, 566-2287.



Conservation Commission Corner

Workshop Meeting

A workshop meeting has been planned for conservation commissions, land trusts, inland wetland agencies, local land-use decision makers, and anyone else who•wishes to attend on Monday, October 20, 1975 at the Holiday Inn in Meriden. (It's the one at the junction of I-91 and the Merritt Parkway). Most of you should already have received notice of this in a brochure mailed late in September. For those of you who didn't but may be interested in attending, we have reproduced the agenda for the conference below:

1:00 - 3:00 P.M. WORKSHOPS

1. LAND ACQUISITION--open space grants in aid; gifts of land; subdivision open space donations; land trust activities
    - George Hancock, Chairman, Wallingford Conservation Commission
    - Richard Wallace, Department of Environmental Protection (DEP)
    - Robert deCourcy, President, Steep Rock Association
2. INLAND WETLANDS REGULATION--state and municipal
    - Cynthia Ivey, administrator, DEP Wetlands Programs
    - Peter Cooper, esq., Woodbridge Inland Wetlands Agency
3. ENVIRONMENTAL EDUCATION--a commission's role
    - Mary Dishaw, Chairman, Granby Conservation Commission
4. WATER POLLUTION CONTROL--local water quality testing programs; innovative waste treatment concepts
    - Charles Fredette, DEP Water Compliance Unit
    - Leonard A. Stevens, author, "Clean Water: Nature's Way to Stop Pollution"

3:00 - 5:00 P.M. WORKSHOPS

1. CONSERVATION COMMISSION OPERATIONS--budget; justifying an employee; successful operations
    - Mrs. Frederick Worcester, Chairman, Simsbury Conservation Commission
    - Michael Aurelia, Greenwich Conservation Commission Director/Inland Wetlands Administrator
    - Thomas Steinke, Conservation Director, Fairfield Conservation Commission
2. USE OF NATURAL RESOURCE DATA FOR LAND PLANNING
    - Robert Miller, DEP Natural Resources Center
3. LAND PRESERVATION--P.A. 490; easements or restrictions; development rights
    - John Hibbard, Secretary-Forester, Connecticut Forest and Park Association
    - Charles Scott, Executive Director, Connecticut Chapter, Nature Conservancy
4. 1975 LEGISLATION--bills of environtal significance which passed or failed
    - Representative Dorothy McCluskey
    - Mary Ann Dickinson, DEP Legislative Liaison

5:00 - 6:00 P.M. CASH BAR

The Connecticut Association of Conservation Commissions,
The Department of Environmental Protection, and
The Soil Conservation Service will be at stations to answer queries and describe technical services available to municipalities

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6:00 - 7:00 P.M. DINNER

Address by DEP Commissioner Joseph N. Gill

7:00 - 9:00 P.M. WORKSHOPS

1. LEGISLATION TO BE INTRODUCED--what legislation should commissions introduce or support? How to do it
    - Arthur Carlson, Connecticut Association of Conservation Commissions Board of Directors
    - Representative Russell Post
2. LAND DEVELOPMENT--master plan; environmental impact assessments; cluster zoning
    - Morton Fine, Morton Fine Associates
    - Gay Ewing, Environmental Consultant, Connecticut Association of Conservation Commissions

(Continued on page 11)

coastal area management

In the September issue of the Bulletin we discussed the Coastal Area Management Program and what has been accomplished during its first year of operation. During the second year the C.A.M. staff, in cooperation with the Department of Planning and Energy Policy and the coastal regional planning agencies, will focus on several specific management and planning tasks. Three of these projects are discussed below.

ANALYSIS OF EXISTING REGULATORY PROGRAMS

Well-coordinated existing regulatory programs will be the keystone in developing a sound coastal management plan. The C.A.M. staff therefore plans to evaluate the effectiveness of all existing state and local permitting programs in the 23 coastal towns. The following specific programs will be reviewed:

- State tidal wetlands
- State structures & dredging
- State and Local inland wetlands
- State encroachment lines
- Local zoning and related regulations
- Federal HUD flood insurance

The analysis will focus on the effects of the various permit processes, including impacts on the resources being regulated (for example, tidal wetlands), shifts in development pressure, changes in re-use potential, and improvement in public access. The impact of federally-mandated air and water regulatory and planning programs on coastal resources will also be given special attention.

CONNECTICUT-NEW YORK COOPERATIVE EFFORT

Following a primary recommendation of the Long Island Sound Study, the Connecticut and New York coastal management programs will begin a concerted effort to coordinate their management planning activities. This will insure cooperation between the two states and will follow-up on proposals and recommendations of the Long Island Sound Study which will require bi-state or joint action. An initial meeting between Connecticut and New York officials was held in June, and a second meeting is planned for October.

PUBLIC INFORMATION AND CITIZEN PARTICIPATION

- The C.A.M. staff will set up during the second year a series of meetings with each coastal community and a series of workshops within each coastal region. The purpose of these meetings and workshops will be to establish direct lines of communication, introduce the C.A.M. program, and exchange ideas on management goals and options. The workshops will be open to the public with local and regional officials specifically invited.

- Work on a resource atlas of marine selected land-related resources of Long Island Sound will begin during the second year. Material for the atlas will be contributed by experts in the field for use by lay people and educational organizations. The emphasis of the material presented in the atlas will be on natural systems and processes (tidal marshes, unique vegetative zones, estuaries, wildlife habitats) rather than on a strict resource inventory of animal species and or vegetative types. The Atlas will be published in quantity early in the third year for public distribution, and it should help to give a better understanding of Connecticut's coastal resources and their inter-relationships.

coastal area management in connecticut
71 capitol avenue hartford, ct 06115

Conservation awards presented

The Connecticut Wildlife Federation presented five Conservation Achievement Awards at its ninth annual conservation recognition banquet on October 11. The banquet address was delivered by DEP Commissioner Joseph Gill, and the awards were presented by Bill Clede, Chairman of the Awards Committee.

Albert F. Bennett of Fairfield, the Bridgeport Sunday Post City Editor, received the Conservation Communications Award which is presented for dedicated service by a member of one of the communications media.

Walter Hylwa, Meriden architect, was honored as State Conservationist for 1975 for his outstanding over-all conservation effort and achievement.

The museum director of the White Memorial Foundation, Gordon Loery of Morris, was named Conservation Educator of the Year, principally for his educational efforts which reach an estimated 20,000 people each year.

As Legislative Conservationist of the Year, State Senator Richard F. Schneller of Essex was cited for his long-term commitment to protecting and enhancing environmental resources.

The Connecticut Audubon Society, for its work in helping to build citizen awareness while working professionally to bring action on key issues and problems, was selected as the Conservation Organization of the Year.

The Connecticut awards competition is part of a joint effort between the National Wildlife Federation and its 50 state affiliates to select Presidential Award winners who will be honored next March in Louisville, Kentucky.

Connecticut's winners were selected from the general public's nominees by a panel of judges consisting of Chairman Bill Clede, W.T.I.C. and Hartford Times Environmental Editor, Dennis P. DeCarli, Chief of the DEP Wildlife Unit, and John Hibbard, Secretary-Forester of the Conn. Forest & Park Association.

Hunting season information

The fall months mean hunting and trapping season to more than 80,000 Connecticut sportsmen. In order to provide necessary information on DEP laws and regulations that govern hunting activities, the following publications have been prepared. Unless otherwise noted, they are all available at Town Clerks' Offices upon request and at the DEP Office of Information & Education, Room 112, State Office Building, Hartford, Connecticut 06115.

The 1975-1976 Abstract of Hunting, Trapping, and Sport Fishing Laws and Regulations. Contains a summary of the more important fish & game laws plus additional information of interest to sportsmen.

The 1975 Connecticut Deer Season Field Guide. Contains a map of state deer check station locations, state-owned deer hunting areas, permit quotas, laws and regulations, check station hours, fees, and other instructions. Also available at the five DEP Regional Offices.

The 1975-1976 Connecticut Migratory Bird Hunting and Duck Identification Guide. Contains a summary of the state waterfowl hunting regulations and a digest of the federal regulations, season dates and bag limits, sunrise and sunset times, and a pictorial duck identification guide for hunters.

*A Hunting Guide to Wildlife Management Areas. Gives description of location, land, game species and wildlife projects for 48 areas. Available only at the DEP Information & Education Office.

from the field

By Douglas Starr

This month we are introducing "From the Field," a monthly column about DEP activities and personnel throughout the state. Doug Starr works with DEP's Information and Education and Water Compliance Units.

Quiet changes are taking place in Connecticut's parks and forests, some of which are not readily visible. But they do take place, and it's generally to the benefit of wildlife, hikers and campers in the area.

I recently spent a day with Dick Harris, Area Manager for the northern part of Region IV - 20,000 acres of state holdings in Windham County in northeastern Connecticut. We toured the area and spoke about some of the projects under his management.

Harris explained that many management techniques used in forests and parks are not evident unless pointed out. This was especially true of the wildlife management areas we saw, which included a deer browse, beaver marsh and managed trout stream.

The deer browse was actually a small clearing in Natchaug Forest. It was cut as part of the state-wide forest management program, which allows the public to cut selected trees for firewood at $3 a cord. The program became popular during the fuel shortage of 1973, and now approximately 150 people get firewood permits at Natchaug each year.

Clearings left by the woodcutting operation enable wildlife to survive in otherwise difficult situations. The berry bushes which deer feed on grow better in full sunlight, and are prolific in the cleared areas. Brush left and stacked by the woodcutters provide shelter for small animals in the winter.

But man is not the only creature who creates and manages wildlife habitats in the forest. From the deer browse area we walked downhill to a beaver marsh, where a stream dammed by beavers spread out into a flat pond covering acres of dead standing trees.

"This floods back more than a mile on each side of us. Beavers are excellent engineers," Harris said.

I asked him why he didn't break up the dam. The beavers had apparently ruined many acres of good forest.

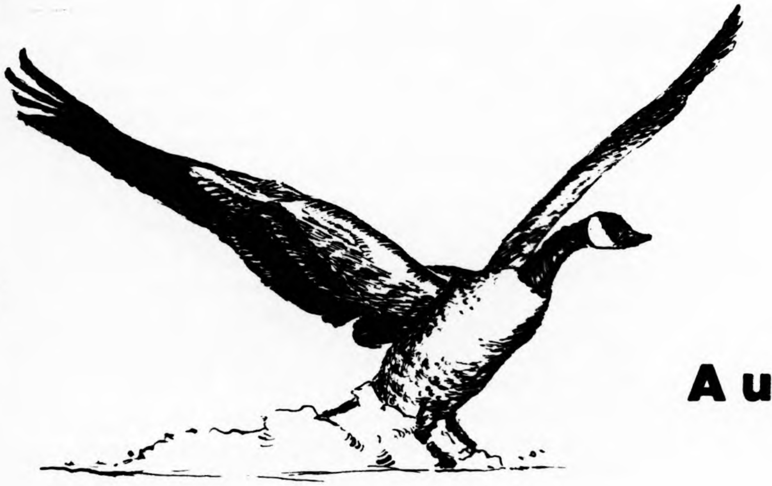
As an answer he clapped his hands a few times and shouted. Frightened, a score of mallard ducks took off from within the trees and weeds, and arched into the air.

"In the spring and fall the sky is black with them," Harris said. "The marsh also supports a variety of wildlife, including Canada geese and woodpeckers. In fact, it's one of the most productive inland habitats we have."

He added that the marsh itself can be more effectively managed by constructing a dam in place of the one the beavers had made. Most dams of this type are made of concrete sides with removable wooden slats between them. Then, when marsh water gets too low and the marsh becomes overgrown, slats can be added to increase the height of the dam and thus deepen the marsh water. When the level becomes too high and ducks have trouble reaching bottom feed, slats can be removed to lower it.

Similar problems with water level can occur in trout streams, as they did in Mashomoquet Brook in Pomfret Center. Due to erosion of its artifically high banks the stream was running dangerously low. As a result the water was becoming warm and deficient in oxygen -- poor conditions for trout.

To correct the problem the Youth Conservation Corps (young people sponsored by a federal/state program to work on public conservation projects during the



A use for dredge spoil

The Waterways Experiment Station of the U. S. Army Corps of Engineers is cooperating with DEP in a research project designed to create wildlife habitat out of sediment dredged from the Connecticut River.

The Corps and DEP are experimenting with a method to productively use dredge spoil, a natural resource usually considered a solid waste disposal problem.

Sandy sediments will be removed from the navigation channel opposite the town of Essex and deposited onto Nott Island, an 8-acre state-owned wildlife management area. The work will be conducted in stages and is aimed at providing a forage, nesting and breeding area for Canada geese.

As part of the first step in conducting this operation, an inventory of existing vegetation and wildlife was recently completed. Critical qualities of adjacent waters and channel sediments were also determined.

The second stage is currently underway A low earthern dike has been constructed on the island to contain sand taken from the main channel. Finer material from the nearby boat anchorage will then be used to top dress the sand and will provide a seed bed for the following step of actual planting. DEP expects the dredging phase of the project will be completed by the end of March. The relocated soil will then be allowed to drain before further work is attempted.

Grasses will be selected for their desirability as goose forage and ability to thrive on the dredged soil. They will be planted early this growing season soon after the surface is prepared with the necessary lime and fertilizer.

Scientists from the University of Connecticut, Connecticut College, and the Corps along with professional staff from DEP are involved in this project. The Wildlife Unit of DEP will assume responsibility for long-term management of the site.

(Continued from page 6)

summer) built a series of rock dams and spillways over a 3/4 mile section of the stream. Water collecting behind the dams deepens and becomes cool. Splashing through spillways, it absorbs oxygen. Cool and well-oxygenated, the water is once again well-suited for sport fish.

Regional personnel also supervised the YCC in clearing a set of "off trail" campsites this summer in Mashamoquet State Park. Each of the eight wooded sites is in a clearing off of the main trail, invisible to the others. At each end of the half-mile trail is an outhouse and water source.

There is also the Heritage Trail: a marked path equipped with campsites leading from Old Sturbridge, Massachusetts to Goodwin Forest in Connecticut. It should be completed by July 4, 1976 and eventually will lead from Old Sturbridge to Mystic, Connecticut.

Quiet programs to benefit both wildlife and camper. "People tend to think of preserved land as forest," Harris said, "but it doesn't all have to be."

"I think of it as some green. A place where people can leave the routine for a healthier, less-mechanized way of life. And be educated while having a good time."

Connecticut's Clean Water Program:

Three rivers:

- *Eight years ago the Mattabassett River received virtually all the domestic wastes from the 70,000 people of New Britain. Though treated, the volume of sewage was far more than the narrow, slow-moving river could assimilate. People used to say you could smell the river before you could see it.*

This same river is now rated by the Department of Environmental Protection as class "B": of a quality suitable for swimming and fishing. Sewage that was discharged to the Mattabassett is now piped to a district treatment plant in Cromwell. Discharge from the treatment plant is released into the larger-capacity Connecticut River.

- *For thirty-three years the former Board of Fisheries and Game had stocked the Willimantic River with rainbow and brown trout. Then, in 1963, stocking was discontinued.*

"It wasn't worth the effort," according to Cole Wilde, Chief of the Department of Environmental Protection's Fish and Water Life Unit. "Pollution in the river kept killing the fish we put in."

Local residents complained of soapsuds downstream of waterfalls, sludgy residues and foul smells.

Under Department of Environmental Protection orders, 32 industries in the area cleaned up their wastes before discharge into or around the river. One municipal sewage plant was upgraded and another was replaced.

The stocking program was resumed in 1973. Seventeen hundred trout were stocked that year and 4,000 were stocked in 1974. No fish kills have occurred.

The Willimantic is now a class "B" river.

- *The Naugatuck River below Torrington was so polluted in the 1950's that, according to one state biologist, "we never took a living organism out of there."*

Thousands of gallons of industrial wastes--including residues of copper, zinc, chromium and brass--poured into the river each day. The river was also a disposal site for domestic sewage from surrounding towns.

The same stretch of river now supports fish--largely sunfish and perch. The Fish and Wildlife Unit of the Department of Environmental Protection is considering stocking the river, but in the words of one state biologist, "every once in a while a slug of pollution comes down and we get a fish kill. In another two or three years we may be able to stock it, though."

by DOUGLAS STARR

the halfway point

These three rivers are examples of varying degrees of progress made by the Department of Environmental Protection in achieving its goal of making all Connecticut waters suitable for swimming and fishing by 1983.

Connecticut's Clean Water Program is at its halfway point, having begun in 1967 with the passage of the Clean Water Act. That Act, innovative for its time, initiated a new, efficient phase in Connecticut water pollution control. It streamlined enforcement procedures and put teeth into anti-pollution laws. At the same time it encouraged municipal and industrial cooperation by authorizing construction grants and tax incentives.

DEP officials recently discussed progress made by the Department since the start of the program eight years ago as well as the condition of Connecticut's waters in general.

Merwin Hupfer, DEP's Assistant Director of Water Compliance, said that Connecticut waters are cleaner now than they have been in 25 years. "Years ago few citizens knew what water pollution was or what to do about it," he said.

In 1967, when the present Clean Water Program began, 648 miles of river and stream were designated as substandard. Since then 618 stream miles have been improved, 165 of those to 1983 fishable-swimmable goals. Of the 75 miles of coastal waters designated to be improved, 62 miles were enhanced in quality, 23 of those up to clean water goals. "Those that are still substandard," Hupfer says, "are in harbor areas--Bridgeport, New Haven, New London and Norwalk. Though we will improve water quality in these areas, harbor areas are not particularly desirable for bathing, and receive a lower clean-up priority than others."

These improvements in water quality are reflected in the generally unpolluted nature of Connecticut's waters: 93 per cent of our 8,400 miles of river and stream and 80 per cent of our 253 miles of coastal waters now meet clean water standards intended to be met by 1983.

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The cleaning of Connecticut's waters is largely due to municipal and industrial cooperation with DEP in treating their water-borne wastes. In both these areas DEP has been phasing-in modern equipment to remove pollutants from wastewater before it is discharged.

With municipal wastes, the strategy of DEP is to upgrade or replace all out-dated sewage treatment facilities in the state. The objective in this area is to replace all primary treatment facilities with at least secondary treatment, ideally by 1983.

Primary treatment means the removal of most solids--by straining and settling--from the community sewage. The liquid portion is then disinfected to remove disease-causing bacteria before discharge to the receiving water. Prior to this process it was standard practice to remove sewage simply by piping it from the town to the nearest river.

But primary treatment is not entirely sufficient. For one thing, it is not uncommon for some solids to escape the strain-settling procedure. And even at optimum operation, the final effluent looks like dirty dishwater.

The next stage of sewage treatment--the one DEP has been phasing-in since 1967--is secondary treatment. In this process sewage is broken down biologically as well as separated and disinfected. Though certainly not drinkable, the effluent is crystal clear.

Comparing survey figures for 1975 and ten years earlier, we see how close DEP is to meeting its objective of statewide secondary treatment by 1983:

--In 1965 there were 91 municipal sewage treatment plants in Connecticut, serving 57% of the population. Of those facilities, 53 provided primary treatment, 33 secondary treatment, with 5 listed as "other."

--Now, in 1975, we have 85 municipal sewage treatment facilities, serving 61% of the people of the state. 81 of these are secondary treatment; only four still primary.

--Since 1965, 26 new treatment plants have been built on DEP orders, and 36 have been modernized to provide secondary treatment. All tolled, over 90% of Connecticut's sewered population is now served by secondary sewage treatment, compared with only 19% ten years ago.

According to DEP Sanitary Engineer Joseph Kosman, not only will DEP meet its 1983 sewage treatment objective, but the Department is "now working to provide for future, projected needs."

Traditonally, the major problem in municipal waste treatment was construction money. The typical cost for treatment plant serving a town of 30,000 is about $3 million. Before 1967 most of this cost had to be paid by the towns, since the federal grant program at the time authorized a maximum of only $250,000 per project.

The financial situation was changed in 1967 when, as part of the Clean Water Act, a state aid program was added to an increased federal share, reducing towns' expenditures to 15% of the construction costs if they adhered to federal clean water requirements. Municipal expenses were further reduced to 10% with grant changes in 1971. Effectively, money obstacles have been cleared and, according to Kosman, "we can proceed on schedule."

• • •

The problems of industrial wastes are the opposite of those associated with domestic sewage. There, though money is available, the complex nature of the wastes often demands highly specialized treatment technology.

Despite the complexities involved, cooperation from industry has been "phenomenal," according to Hupfer.

Though the number of Connecticut industries has significantly increased in the last several years, more than 90 per cent of all industrial wastes in the state are now treated. Ten years ago, with fewer industries, only 53 per cent of these wastes received treatment.

This cooperation is partially due to procedural changes brought about by the 1967 Clean Water Act.

Prior to 1967, each time a state Order to Abate Pollution was issued the recipient had to come to a show cause hearing--to "show cause" why the order should not be given. A state Order is a legally binding directive to correct a pollution problem--either by wastewater treatment or process modification.

"The recipient was put in a position of defending himself against something that, in most cases, he didn't even understand," commented Hupfer. "This created an antagonistic atmosphère from the beginning."

The situation was changed with the passage of the '67 law. Now when orders are issued, hearings are permitted but not required. The hearing therefore is more a discussion than a defense. The recipient sees himself protected by the law rather than challenged by it.

With the elimination of mandatory hearings, the state's hearing load was reduced by about 85 per cent. This reduced load enabled DEP to move more swiftly which, paradoxically, met the approval rather than resistance of private industry. Hupfer explained: "When we were encumbered by mandatory hearings, the best we could do was move in a piecemeal fashion. We couldn't hit all polluters at once, and those who did receive orders felt we were singling them out.

"Now we can issue Orders unilaterally, and no individual enterprise is put at a disadvantage with its non-complying competitors."

Are industries at all discouraged from settling in Connecticut because of tight anti-pollution requirements?

Hupfer says no. Under the nationwide Clean Water Act, all states alike must meet basic federal water quality standards. The would-be pollutor "would find similar regulations in other states."

"Any industry that cannot support the cost of discharge treatment is at best a marginal operation," Hupfer added. "We've had a few closures, but these were operations that were failing anyway. For them the Order to Abate was just the last straw."

• • •

There is one form of pollution that, statistically at least, seems to be increasing. The number of reported oil spills has gone from 90 in fiscal year 1971, to 138 in 1972, to 317 in '73, to 527 in '74, to this year's 582.

Engineer Bill Hegener, of DEP's Oil and Chemical Spill section, attributes this increase more to an increased awareness of what to do when a spill occurs rather than to a greater number of spills themselves.

"Companies and their personnel are more conscientious in reporting minor spills that occur on the job. Even the man in the street is reporting spills to us. He'll be out for a walk, see a spill behind a gas station and call."

Prior to 1969 there was no state action plan for responding to major oil spills. Clean-up was done, often ineffectively, by private contract. Then in 1969 the Oil Spill Contingency Plan--part of a federal/state cooperative response to spills--was added to Connecticut's Clean Water Program. Now, in addition to supervising clean-up operations, DEP personnel work with the owners of oil handling facilities to prevent or minimize the danger of future oil spills.

A prime example of the effectiveness of the plan was seen last October, when 85,000 gallons of heavy industrial oil leaked into New Haven Harbor after a tanker scraped bottom. Within hours the clean-up operation had begun. After two days only minor concentrations of oil remained in the harbor; after five days clean-up operations along the eight mile stretch of coastline were completed.

• • •

There remains a percentage of Connecticut's inland and coastal waters to be cleaned-up, and in some cases it will be a stubborn task. But members of the Water Compliance Unit are optimistic that if public and private cooperation continue, the Clean Water goal will be met by 1983 or shortly thereafter.

"How far we go after that, " said Assistant Director Hupfer, depends on the public's attitude. Are they satisfied with the quality of our waters, or do they want better? And if they do, we hope they'll support the necessary programs and costs to meet that end."

CONSERVATION COMMISSION CORNER

(continued from page 3)

Les Corey, Glastonbury Environmental Planning Assistant
Theresa Parla, Chairman, Manchester Conservation Commission

3. AIR POLLUTION CONTROL--air quality maintenance plans; local participation in indirect source program; transportation controls
   Henry Beal, Director, DEP Air Compliance Unit
4. HISTORIC PRESERVATION PROGRAMS--federal, state and local
   Herbert M. Noyes, Jr., Architect, Guilford Conservation Commission

REGISTRATION FEE
CACC Member - free of charge
Non-members - $1.00
DINNER FEE
$6.05 per person

TOTAL: Non-members - $7.05
Members - $6.05

Dinner reservations should be made by

OCTOBER 13, 1975

Do not send money----------pay at door

Mail to:

CONNECTICUT ASSOCIATION OF
CONSERVATION COMMISSIONS
P. O. Box 72
GEORGETOWN, CONNECTICUT 06829

State carpool program

For the past two years, the Department of Environmental Protection has been promoting carpooling as part of the State Transportation Control Plan. In conjunction with this effort, the Department of Transportation has been operating a computerized carpool matching service to encourage employers to provide monetary and preferential parking incentives to carpooling employees. Carpool applications have been made available in many locations throughout the state, and cooperation has been excellent from many major employers.

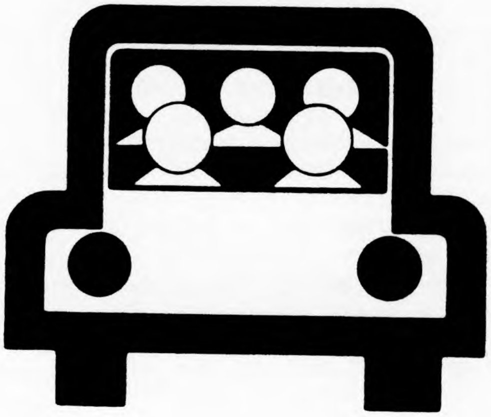
A new feature was recently incorporated into the program. Through a federal grant which finances 84% of the cost, the Department of Motor Vehicles will begin in October to enclose carpool applications in motor vehicle registration renewal forms. Returning the carpool application will be entirely optional.

The carpool applications received with the registration renewals will be delivered to the Department of Transportation, where a computer will match each applicant with all other applicants. Within four weeks a list of prospective poolmates with similar home origins, working destinations, and working hours will be sent to the applicant, in addition to suggestions on how to organize the carpool.

By increasing the number of persons in the carpool data bank, the likelihood that an applicant will be suitably matched will increase. Carpooling will enable many Connecticut commuters to save substantially on their car-commuting costs to an average of about $300 a year. If even a small percentage of people carpool as a result of this program, the auto-cost savings will greatly outweigh the cost the state incurs in administering the program. Increased carpooling will reduce air pollution, traffic congestion, traffic accidents, gasoline consumption, parking demand, noise, road wear, and the demand for new roads and automobile facilities.

A carpooling information service has been set up jointly by the Departments of Motor Vehicles, Transportation, and Environmental Protection. Toll-free numbers are provided for information about the program or about carpooling in general. Carpool application forms will be sent out upon request.

THE NUMBER TO CALL IN THE HARTFORD AREA: 566-5922
THE NUMBER TO CALL OUTSIDE THE HARTFORD AREA: 1-800-842-1910



Dredging Seminar

The Stamford Environmental Protection Board is sponsoring a one-day seminar on "The Problem of Dredging" on Wednesday, October 29, 1975 at the Howard Johnson Motel on Harvard Avenue in Stamford. The all-day program will include a question-and-answer session with a panel of representatives from the Yale University Department of Geology and Geophysics, Conservationists of Stamford, Inc., the Stamford Waterfront Industry Association, the Oceanic Society, Inc., and DEP.

The seminar will be held from 9:30 a.m. to 4:00 p.m., with a luncheon from 12:15 to 1:30 at which DEP Commissioner Joseph Gill will speak. Cost is $8.50 per person. If you are interested in attending, send a check for $8.50 (payable to "Dredging Seminar") to:

E. A. Connell, Seminar Coordinator
EPB, Room 1, Municipal Office Bldg.
429 Atlantic Street
Stamford, CT 06901

university of connecticut

INSTITUTE OF WATER RESOURCES

available publications

As briefly mentioned in the September Citizens' Bulletin, information dissemination activities constitute a major portion of the Institute of Water Resources program. The Institute maintains a "Report Series," consisting of publications designed to appeal to a segment of the population with broad-based water resource interests. In most cases, competency in a specific scientific discipline is not necessary for understanding the material presented. Several of the more recent Institute Reports are summarized in the following listing:

Report No. 22, "Connecticut Water Law: Summary and Index of Statutes," by R. W. Deitchman, provides a guide to and abstracts of each of the relevant water resource related statutes from the Connecticut General Statutes. $3.00/copy (Conn. residents add appropriate sales tax).

Report No. 23, "Water Resources: A Bibliographic Guide to Reference Sources" by V. H. Ralston is designed to facilitate the location, especially in the University of Connecticut Library system, of water-related information in the broad spectrum of resource works and bibliographies presently available. $5.00/copy (plus appropriate sales tax).

Report No. 24, "Proceedings of the Second Wetlands Conference," M. W. Lefor, H. H. Ridgeway, and T. Helfgott, editors, a compilation of the proceedings of a conference held January 9, 1974 at the University of Connecticut, Storrs, designed to aid in understanding the technical and legal aspects of the boundaries of wetlands, with particular reference to inland wetlands legislation in Connecticut. (charge not yet determined).

Report No. 25, "The Impact of Urbanization on Columbia Lake, Connecticut," by J. Kennedy and S. Zwerling, is the first in a series on the variety of factors which relate to the urbanization of New England lakes. Land use, regulatory agencies, eutrophication, water quality and limnology are considered as they involve lakes affected by the presence of man over an extended period (available at no charge).

Other publications which are available from the Institute include research project completion reports, available free of charge; copies of scientific articles published in journals by project investigators, available for the cost of xeroxing; and graduate student-prepared theses and dissertations. These research papers furnish more specific information on particular phases of many Institute-sponsored projects.

The Institute also distributes a newsletter which reports water-related news, describes the activities of the Institute (including the seminar series) and new publications. You may request that your name be added to the Institute mailing list or obtain information on any of the publications listed above by writing to the following address:

Institute of Water Resources
The University of Connecticut, Box U-37
Storrs, Connecticut 06268

THE CITIZENS' BULLETIN IS SUPPORTED IN PART BY FUNDS PROVIDED BY THE U. S. DEPT. OF THE INTERIOR, AS AUTHORIZED UNDER THE WATER RESOURCES RESEARCH ACT OF 1964, PL 88-379.

The 1975 Deer Season

With the opening of the 1975 Deer Hunting Season, the white-tailed deer will gain its status as a full-fledged game animal in Connecticut, ending years of treatment as an "agricultural nuisance."

The return of the white-tail to game status was authorized by the 1974 General Assembly in the Deer Management Act, now codified as Sections 26-82 through 26-86f of the Connecticut General Statutes.

"The Legislature's action brings to a close a rather long era of largely unlimited and uncontrolled shooting of deer under the old 'crop protection' permit system," according to Wildlife Unit Chief Dennis DeCarli.

Under the previous laws, virtually any landowner could apply for a crop protection permit and with it shoot any number of "nuisance" deer at any time of the year. The only true deer hunting on state land was limited to a small number of bow and arrow hunters. There was also a provision to allow firearm hunting on private land with the owner's permission, but the privilege was limited to those hunters who had friends with large land holdings.

According to DeCarli, the result of this system was that "most of the deer killed by men in this state were probably taken illegally. We estimate that poachers probably accounted for at least 2,500 deer a year. While this may have kept the herd in balance with its food supply in some areas, the poaching was uncontrolled and uncontrollable and represented the worst type of wildlife management situation.

"The deer were being illegally jack-lighted at night, with no real chance for escape. Naturally the poachers didn't report their killing, so the wildlife biologists found it impossible to manage the state's herd scientifically and had to resort to guesstimates. For example, without being able to examine the annual kill at deer check stations the biologists had a difficult time determining age classes and herd conditions," DeCarli said.

"The new law will enable us to get the information we need from the sportsman. Our aim is to distribute the harvest throughout the state so that no one area will be overhunted. By the issuance of a limited number of firearm licenses and a mandatory reporting requirement, we can develop, for the first time, a sound program of wildlife management for our deer," he said.

Mandatory check stations will be operated to collect biological data to determine the age structure, productivity and physical well-being of the deer population.

The new licenses will allow the use of shotguns with slugs or old-fashioned muzzleloaders but not modern rifles on state lands. Another change is that the old system of giving a fixed number of seasonal permits to hunt on private land has been replaced by a system based on the acreage owned by a given individual.

"All of these management measures," DeCarli said, "combined with regulations governing seasons and bag limits will enable us to control the hunt and protect the future of the herd."

In order to put the new season on a firm scientific footing, deer biologist Paul Herig conducted research for two winters to determine the size of the state's herd.

The research was based on an aerial survey, designed by Herig in 1974, which was used as an index to estimate the total deer population. Herig tabulated all deer that were actually seen against a snow background from a low-flying, slow-moving helicopter on randomly-selected, standardized plots. The average number of deer seen per square mile was then projected over the square miles of potential deer habitat in the state. This resulted in a population estimate of 15,000-19,000 deer. In 1975 the same survey was conducted, and again the figures were the same, indicating the consistency of the technique.

"We used the population estimated from the surveys, combined with records of past reported kills from various causes and poaching estimates, to determine a conservative season length and the number of permits to be issued.

"Management based on biological information rather than emotionalism or politics will ensure that we have a healthy, productive deer population without running the risk of deteriorating the deer habitat which remains," Herig said.

1975 SEASON DETAILS

BOW AND ARROW HUNTING - October 20 through December 6

1. Allowed on state forests and wildlife management areas (consult field guide)
2. Allowed on private lands with written permission of the landowner ("consent" forms not needed)

MUZZLELOADER HUNTING - December 6 through December 13

1. Allowed on state lands only if lottery permit received
2. Allowed on private lands with written permission of the landowner on "consent" forms issued by DEP
3. Allowed on personally-owned lands with no acreage requirement

SHOTGUN HUNTING - December 15 through December 17 Bucks only - December 18 through December 31 for Either sex

1. Allowed on state lands only if lottery permit received
2. Allowed on private lands with written permission of the landowner on "consent" forms issued by DEP
3. Allowed on personally-owned lands with no acreage requirement

Based on the 1974 Deer Management Act, DEP established a deer season on state land for the first time this year. Since only a limited number of permits could be issued the many thousands of sportsmen who applied, a computer lottery was run to determine those to receive permits. 2,132 permits will be granted for the shotgun season, and 1,038 permits for the muzzleloader season.

DEP CITIZENS' BULLETIN SUBSCRIPTION FORM

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Hartford, Connecticut 06115

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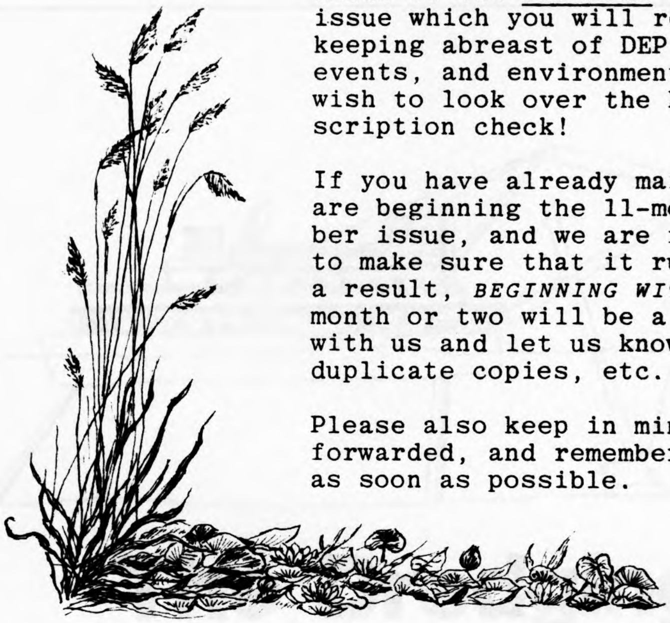

Unless we receive a subscription request from you, this issue of the Citizens' Bulletin will be the last free issue which you will receive. If you are interested in keeping abreast of DEP regulations, key conferences and events, and environmental issues in general, you may wish to look over the Bulletin and send in your subscription check!

If you have already mailed us a check, thank you. We are beginning the 11-month subscription with the November issue, and we are refining our subscription system to make sure that it runs smoothly and accurately. As a result, *BEGINNING WITH THE NOVEMBER ISSUE*, the following month or two will be a "shakedown" period -- please bear with us and let us know of any problems in address labels, duplicate copies, etc. We are working on it !!!

Please also keep in mind that second-class mail is not forwarded, and remember to send us any address changes as soon as possible.

- The Editor

MANY THANKS TO ALLEN CARROL FOR HIS COASTAL AREA MANAGEMENT ILLUSTRATIONS AND TO ROSEMARY GUTBROD FOR HER RENDITION OF AN ATLANTIC SALMON.

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Commissioner: Joseph N. Gill
Editor: Mary Ann Dickinson
Illustrator: Deborah Dumin
Phone: 566-5524

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